



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|----------------------------|------------------|
| 09/910,809 | 07/24/2001 | Stefano Coccia | 34658/GM/lp | 3939 |
| 7590 07/07/2005 MODIANO & ASSOCIATI Via Meravigli, 16 MILANO, 20123 ITALY | | | EXAMINER HOEY, ALISSA L | |
| | | | ART UNIT 3765 | PAPER NUMBER |

DATE MAILED: 07/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/910,809

Applicant(s)

COCCIA, STEFANO

Examiner

Alissa L. Hoey

Art Unit

3765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 19-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 19-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This is in response to amendment received on 04/27/05. Claim 21 has been amended and claims 1-14 and 18-22 are examined below.

Claim Objections

2. Claim 1 is objected to because of the following informalities: should there be the word "to" inserted between regards and elongation? Appropriate correction is required.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "the support and the padding being made of a material having the same characteristics as regards to elongation along multiple planes" of claim 21 is not found in the specification.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-11 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gibbens et al. (US 4,805,243) in view of Speth et al. (US 5,271,101).

In regard to claim 1, Gibbens et al. provides a protective element (5) in a pair of cycling shorts (1) having at least one double-stretch padding connected (column 3, lines 9-14). The double-stretch padding (5) being arranged at a crotch region of the pair of cycling shorts (1) and the double-stretch padding (5) being adapted at the crotch region of the pair of cycling shorts (1). The support element (1) is the material making up the cycling shorts. The padding of Gibbens is made out of neoprene foam which is a synthetic resilient material having double-stretch (column 3, lines 9-14).

It is inherent that the cycling shorts of Gibbens are made out of Lycra, Spandex, Nylon or combinations thereof, since biker shorts are made out of a Lycra, Spandex, Nylon or combination thereof. Lycra, Spandex and nylon are double stretch materials that are form fitting and expand to fit around a user's curves without being too loose or to constricting to the user.

It is further inherent that the cycling shorts of Gibbens being made out of nylon, Spandex, lycra or combinations thereof would provide a material that has elongation along multiple planes.

However, Gibbens fails to teach the double-stretch padding being attached to the shorts in an absence of stitched seams.

Speth et al. teaches a cycling short having an open cell padding attached to the shorts by lamination (column 3, lines 27-30).

It would have been obvious to have provided the cycling shorts of Gibbens with the laminated padding attachment of Speth et al., since the cycling shorts of Gibbens provided with the padding being attached by laminating instead of stitching, since the

stitches used to connected the pad to the cycling shorts can cause abrasion and chafing to the cyclist.

In regard to claim 2, it is inherent that Gibbens teaches the Lycra, Spandex, nylon or combinations thereof support element is double-stretch material that can elongate along multiple planes, including mutually perpendicular ones.

In regard to claim 3, it is inherent that Gibben teaches the Lycra, Spandex, nylon or combinations thereof to have an elasticity of 30%-40%, since Lycra, Spandex and nylon are known to have elasticity of 30%-40% and as stated in Applicant's specification of page 4, lines 4-6.

In regard to claim 4, Gibbens fails to teach the support element being connected to the pair of cycling shorts. However, Gibbens teaches that the support element is the cycling shorts main body.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to have provided the support element being separate from the cycling shorts body because Applicant has not disclosed that the support element being separate from the cycling shorts body provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the support element being separate from the cycling shorts body or the same as the cycling shorts body because as long as the padding is attached to the double-stretch support it being a separate element or not does not effect the cycling shorts according to applicant's specification (page 4, lines 7-8). Therefore, it

Art Unit: 3765

would have been an obvious matter of design choice to modify Gibbens to obtain the invention as specified in claim 4.

In regard to claim 5, Gibbens provides the double-stretch padding to be open cell padding with a high density (column 3, lines 9-14). The padding of Gibbens is made out of Neoprene which is a open cell high density padding (column 3, lines 9-14).

In regard to claim 6, it is inherent that Gibbens provides the padding being deformable in multiple directions, including mutually perpendicular directions, since the neoprene foam padding is resilient and would deform in any direction as manipulated including along the perpendicular (column 3, lines 9-14).

In regard to claims 7 and 8, Gibbens fails to teach the density of the padding being between 55 and 95Kg/m³ or 65 kg/m³.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to have provided the density of the padding being between 55 and 95 or 65 Kg/m³ because Applicant has not disclosed that the density of the padding being between 55 and 95 or 65 Kg/M³ provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the density being any because as long as the padding provides comfort and protection to the user sitting on a bike seat. Therefore, it would have been obvious matter of design choice to modify Gibbens to obtain the invention as specified in claims 7 and 8.

In regard to claims 9 and 10, Gibbens teaches the thickness of the padding being 1/8 to 1/4 of an inch or so thick, which falls into the range of 5-12mm.

At the time the invention was made it would have been an obvious matter of design choice to a person of ordinary skill in that art to have provided the padding being 10mm because Applicant has not disclosed that the padding being 10mm provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the thickness of the padding being 10mm or 5-12mm because as long as the padding provides protection to the user when sitting on a bike seat the exact thickness can be determined by the weight of the person and their comfort level. Therefore, it would have been an obvious matter of design choice to modify Gibbens to obtain the invention as specified in claim 10.

In regard to claim 11, Gibben provides the padding being constituted by a first central element (23) which is approximately at a tangent to an imaginary curved line of the crotch region of the pair of cycling shorts.

In regard to claim 18, Gibbens provides the support and the shorts being made out of one and the same material.

In regard to claim 19, Gibbens fails to teach the padding being connected to the support by a high-frequency or thermoformation or ultrasound application method.

Speth et al. teaches a cycling short with padding attached by lamination which is a form of thermoformation (column 3, lines 27-30).

It would have been obvious to have provided the cycling shorts of Gibbens with the padding attached by lamination of Speth, since the cycling shorts of Gibbens provided with the padding attached by lamination instead of stitching, since the stitches used to connect the pad to the cycling shorts can cause abrasion and chafing to the cyclist.

In regard to claim 20, Gibbens provides the padding being applied only at points where resting on a saddle of a bike occurs and no padding is provided at any other areas of the support (figure 2, identifier 5).

6. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gibbens et al. and Speth et al. as applied to claims 1 and 11 above, and further in view of Garneau (US 6,393,618).

Gibbens and Speth et al. fail to teach all of the limitations of claims 12-14. However, Garneau teaches the limitations of claims 12-14.

In regard to claim 12, Gibbens teaches a second (6a) and pair of third elements (17, 18) of the pad portion. However, Gibbens fails to teach flat regions interposed at transverse ends of the first central element.

Garneau teaches first (20), second (22) and a pair of third elements (24, 26) of a pad in a cycling short garment (figure 6). The second element (22) of the pad is formed at the front of the crotch region of the pair of cycling short and the third pair of elements (24, 26) are formed at a rear of the crotch region of the pair of cycling shorts, with flat regions (26) interposed at transverse ends of the first central element.

In regard to claim 13, Gibbens teaches the third elements (17, 18) being mirror-symmetrical with respect to a central plane which is longitudinal to the double-stretch padding (figure 3). However, Gibbens and Speth fail to teach the third pair of elements being mutually divided by a second flat region which accordingly lies at the longitudinal central plane.

Garneau teaches a third pair of elements (24, 26) of the padding being mutually divided by a second flat region (36) which accordingly lies at the longitudinal central plane.

In regard to claim 14, Garneau teaches the first flat regions (36), and therefore the dimension of the first central element (20) and the second element (22) and the third elements (24, 26) are such that they are formed at a folding region of the double-stretch padding that is not affected, at the first, second and third elements, by any deformation during use (column 2, lines 20-36).

It would have been obvious to have provided the cycling shorts of Gibbens and Speth with the flat elements on pad of Garneau, since the cycling short of Gibbens and Speth provided with flat regions between first, second and third elements of the pad assist in enabling the flexible sheet member to conformingly fit onto the crotch portion of the cyclist for dynamic comfort of the cyclist during pedaling.

7. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gibbens et al. in view of Garneau.

In regard to claims 21 and 22, Gibbens provides a protective element (5) in a pair of cycling shorts (1), the protective element comprising a support (1) of the cycling

shorts with which at least one double stretch padding is connected (column 3, lines 9-14). The double-stretch padding being arranged at a crotch region of the pair of cycling short and the double stretch padding comprising a first (23), second (6a) and third pair of elements (17, 18).

It is inherent that the cycling shorts of Gibbens are made out of Lycra, Spandex, Nylon or combinations thereof, since biker shorts are made out of a Lycra, Spandex, Nylon or combination thereof. Lycra, Spandex and nylon are double stretch materials that are form fitting and expand to fit around a user's curves without being too loose or to constricting to the user.

However, Gibbens fails to teach the first central element is arranged approximately at a tangent to an imaginary cured line of the crotch region of the pair of cycling short. The second element formed at a front of the crotch region of the pair of cycling short and a third pair of elements formed at a rear of the crotch region of the pair of cycling shorts with first flat regions interposed, at a transverse ends of the first central element. The third elements are mirror symmetrical with respect to a central plane which is longitudinal to the double-stretch padding and are mutually divided by a second flat region which accordingly lies at the longitudinal central plane. Further, Gibbens fails to teach the support and the padding being made out of the same material.

It would have been obvious to have provided the support and the padding being made out of the same material or different materials since as long as the padding and the support element are made out of double stretch material, Applicant provides no criticality that the padding and the support have to be made out of the same material.

The padding and support of Gibbens are double stretch and therefore are equivalent to the disclosed invention.

Garneau teaches a cycling short having a first central element (20) arranged approximately at a tangent to an imaginary curved line of the crotch region (figures 2 and 6). The second element (22) formed at a front of the crotch region of the pair of cycling short and a third pair of elements (24, 26) formed at a rear of the crotch region of the pair of cycling shorts with first flat regions (36) interposed, at a transverse ends of the first central element. The third elements (24, 26) are mirror symmetrical with respect to a central plane which is longitudinal to the double-stretch padding and are mutually divided by a second flat region (36) which accordingly lies at the longitudinal central plane.

It would have been obvious to have provided the cycling short of Gibbens with the flat regions of Garneau, since the cycling short of Gibbens provided with flat regions between first, second and third elements of the pad assist in enabling the flexible sheet member to conformingly fit onto the crotch portion of the cyclist for dynamic comfort of the cyclist during pedaling.

Response to Arguments

8. Applicant's arguments filed 04/27/05 have been fully considered but they are not persuasive.

1) Applicant argues that Gibbens (US 4,805,243) fails to teach the external fabric layer being elastic.

Examiner disagrees since it is inherent that the cycling shorts of Gibbens are made out of Lycra, Spandex, Nylon or combinations thereof, since biker shorts are made out of a Lycra, Spandex, Nylon or combination thereof. Lycra, Spandex and nylon are double stretch materials that are form fitting and expand to fit around a user's curves without being too loose or too constricting to the user. Lycra, Spandex and nylon are all made with elastic material.

II) Applicant argues that Gibbens and Speth would not produce a support having a padding made out of a double stretch material with the same characteristics as regards to elongation along multiple planes.

Examiner disagrees since Gibbens teaches a padding and support made out of double stretch material which is have the same characteristics as regard to the elongation along multiple planes. Further, Gibbens teaches all the limitations except for the coupling of the padding to the garment by lamination. Speth teaches a bike short with a padding that is attached to the garment by lamination instead of stitched seams. It would have been obvious to have provided the garment and padding of Gibbens with the lamination attachment of the padding of Speth, since the padding of Gibbens being laminated would allow for attachment without uncomfortable seams rubbing against the user's skin.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

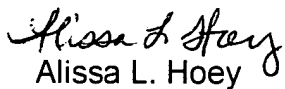
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alissa L. Hoey whose telephone number is (571) 272-4985. The examiner can normally be reached on M-F (8:00-5:30) Second Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on (571) 272-4983. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3765

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Alissa L. Hoey
Patent Examiner
Technology Center 3700